Math 1215Z/1220: D.C. College Algebra
Valencia High School
Online Course

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Contents

1　Office and Contact Information:

Office: A-123B
Office Phone: 505-925-8607
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2　Office Hours:

These will be held via Zoom, with the link to be posted in Blackboard under 'Office Hours'. My Thursday evening office hour is exclusive to this class and may change depending on student needs; however, any of my regular office hours are also accessible and you are welcome to come join any of them:

5:30pm-6:30pm (Thursdays), 12:00pm-2:30pm Mondays/Wednesdays, or by appointment

3　Overview

Welcome to Math 1215Z/1220! This is a combined course, is the UNM course description:

Math 1215Z A study of linear and quadratic functions, and an introduction to polynomial, absolute value, rational, radical, exponential, and logarithmic functions. A development of strategies for solving single-variable equations and contextual problems.

This is the third course in a three-part sequence. In order to receive transfer credit for MATH 1215, all courses in this sequence (MATH 1215X, MATH 1215Y, MATH 1215Z) must be taken and passed.

Pre- or corequisite: 1215Y.

Math 1220 The study of equations, functions and graphs, reviewing linear and quadratic functions, and concentrating on polynomial, rational, exponential and logarithmic functions. Emphasizes algebraic problem solving skills and graphical representation of functions.

Prerequisites/placement: Successful completion of MATH 1215 or minimum ACCUPLACER score of 239-248 (Advanced A and F) or math ACT score of 22-24, or math SAT score of 510-569.

Note: This syllabus is subject to change, if needed.

4   Student Learning Outcomes (SLOs)

Upon successful completion of the course, students will be able to:

4.1   Math 1215Z

1. Demonstrate appropriate use of basic function language and notation.

   (a) Communicate or present mathematical concepts using correct mathematical notation and terminology.
   (b) Correctly use function notation and vocabulary related to functions.
   (c) Determine function values for given domain values and determine domain values for given function values.
   (d) Determine domains for specific functions.

2. Convert between equivalent forms of algebraic expressions.

   (a) Simplify expressions using properties of exponents.
   (b) Simplify rational expressions.
   (c) Simplify radical expressions.
   (d) Rewrite exponential functions in logarithmic form and vice versa.

3. Solve single-variable equations of the types listed above.

   (a) Solve equations containing rational expressions.
   (b) Solve equations containing radical expressions.
   (c) Solve absolute value equations in one variable.
   (d) Solve exponential and logarithmic equations using equating bases.

4. Interpret and communicate algebraic solutions graphically and numerically.

5. Demonstrate contextual problem-solving skills that include setting up and solving problems and interpreting solutions in context.

   (a) Analyze solutions to application problems and give them contextual meaning.

6. Apply appropriate problem-solving methods from among algebraic, graphical, and numerical.

   (a) Perform operations with radical expressions.
   (b) Perform operations with rational expressions.
   (c) Solve absolute value inequalities in one variable.
   (d) Apply solution methods learned to application problems.

4.2 Math 1220

1. Use function notation; perform function arithmetic, including composition; find inverse functions.

2. Identify functions and their transformations given in algebraic, graphical, numerical, and verbal.

3. Graph and interpret key feature of functions, e.g., intercepts, leading term, end behavior, asymptotes.

4. Solve equations algebraically to answer questions about graphs, and use graphs to estimate solutions to equations.

5. Solve contextual problems by identifying the appropriate type of function given the context and creating a formula based on the information given.

6. Communicate mathematical information using proper notation and verbal explanations.

5 Technical Requirements

5.1 Computer

- A high-speed Internet connection is highly recommended.

- Supported browsers include: *Detailed Supported Browsers and Operating Systems*

- Any computer capable of running a recently updated web browser should be sufficient to access your online course. However, bear in mind that processor speed, amount of RAM and Internet connection speed can greatly affect performance. Be aware, some programs that use mathematics will not work well on mobile devices such as smart phones or tablets.

- Microsoft Office products are available free for all UNM students:
  UNM IT Software Distribution and Downloads page

- Please update your contact information in Loboweb: *MyUNM*. When you log into MyUNM, Enter LoboWeb. Click on the Personal Information link to make sure your contact information is up to date.

- Laptops may be available for checkout for the Fall semester from the *UNM-Valencia Library* . Contact *UNM-Valencia Student Services* for more information.

5.2 Printer/Scanner

You will need access to a printer/scanner in order to print out written assessments such as projects or exams, and scan them in order to submit via UNM Learn.

5.3 Web Conferencing

Web conferencing will be used in this course during office hours and study sessions. For the online sessions, you will need:

- A USB headset with microphone. Headsets are widely available at stores that sell electronics, at the UNM Bookstore or online.

- A high-speed internet connection is highly recommended for these sessions. A wireless Internet connection may be used if successfully tested for audio quality prior to web conferencing.

- You should also dress as you would when attending an in-person class, even if you do not turn on your video camera.

- To create a UNM supported Zoom account, visit the *UNM Zoom log in page*.

6 Netiquette

NOTE: For links to online PDF formatted documents, you may need to give permission for the document to open. Look for a pop-up window asking for your permission.

One of the overriding principles in online conversations is to âcraft your responses effectively.â It is sometimes difficult to remember that there are real people reading posted messages. This is especially true of online communication where others do not have the opportunity to see body language or hear tone of voice; therefore, misunderstandings are more likely.

Please, follow these guidelines in all of your online responses and discussion postings:

- Honor everyone's right to an opinion.

- Respect the right of each person to disagree with others.

- Respond honestly but thoughtfully and respectfully; use language which others will not consider foul or abusive. You may also use emoticons to convey a lighter tone.

- Respect your own privacy and the privacy of others by not revealing information which you deem private and which you feel might embarrass you or others.

- Be prepared to clarify statements which might be misunderstood or misinterpreted by others.

6.1 A Special Note about Anger

- Do not send messages that you have written when you are angry, even anonymous ones. In the online world, angry messages are known as "flamingâ and are considered bad behavior. Venting and flaming are two different things. It is possible to vent without becoming "ugly.â Stick to the facts of what is causing you frustration.

- Do not send messages that are written all in upper case; this is the visual equivalent of SHOUTING. It is considered aggressive and is considered bad behavior. If you ever feel like shouting a message, take a deep breath and wait until you have calmed down before responding. Then, respond in a calm and factual manner.

- For more information on netiquette, please refer to *UNM Netiquette document*.

7 Notes to students about participation in course using UNM Learn:

7.1 Tracking Course Activity

UNM Learn automatically records all studentsâ activities including: your first and last access to the course, the pages you have accessed, the number of discussion messages you have read and sent, web conferencing, discussion text, and posted discussion topics. This data can be accessed by the instructor to evaluate class participation and to identify students having difficulty.

7.2 Submitting Assignments

When you submit an assignment via UNM Learn, you will receive an email receipt of your submission from do-not-reply@learn.unm.edu. Save this email as confirmation of your submission.

8 Coursework and Participation

8.1 Communication with Instructor

I routinely check for student emails, Monday through Friday, at various times throughout the morning, afternoon and evening, as well as occasionally on weekends. Expect a response no later than 24-48 hours. If I haven't responded within 48 hours, please resend your email, as it may have (accidentally) been overlooked!

8.2 Late or Missing Work

- Late work *may* be accepted, depending on the circumstances, but may be subject to a penalty of up to 10% per day. If you need an extension, please notify me through email at least 24 hours before assignment is due and explain your situation.

- All written work needs to be submitted online. If you have a difficulty using a tool to complete work, use the "Create a Tech Support Ticket" link in the Course Menu immediately and notify your instructor, as well.

- If you are ill and are not able to complete work on time, please let me know as soon as possible. I will work with you to shift deadlines but be aware that all assignments must be complete by the end of the semester. This may mean that when you are feeling better you will need to spend a lot of extra time to catch up. Also, if you are behind, the posted lectures or class session recordings may not be as helpful to your learning until you are ready to learn that material.

8.3 Expectations for Students

Please note that in order to be successful in this course, and in mathematics courses in general, you will need to spend a fair amount of time each week working on this course.

Here are my recommendations for the *minimum* amount of time you should be spending in this course *each week*:

- Homework: 4-6 hours/week

- Office Hours: 30 min to 2 hours/week

- General Studying: 1-3 hours/week outside of homework and office hours

A more detailed schedule for assignments, exams, projects and their due dates can be found on Blackboard, and may be subject to change.

9   Required Text

The required text (or eText) for this course is (1215Z) Developmental Mathematics, 2nd edition, by Sullivan, Struve, Mazzarella (scans will be provided) and (1220) College Algebra on OpenStax. It is freely accessible online, here: College Algebra Textbook

10   Course Structure

This course will consist of the following graded components. Though Math 1220 will consist of one additional, cumulative final exam at the end of the Spring semester, the weights for 1215Z and 1220 will remain the same:

- Homework (20%)

- Participation, High School Homework (20%)

- Projects (20%)

- Exams (40%)

For written assessment submissions such as projects and exams, you should typically expect your grades within one week.

11   Grading Policy

Your final grades will be calculated as follows. Your current average can be found in the 'My Grades' section in Blackboard.

Cumulative Average	Final Grade
[96.5%, 100%]	A+
[93%, 96.5%)	A
[89.5%, 93%)	A-
[86.5%, 89.5%)	B+
[83%, 86.5%)	B
[79.5%, 83%)	B-
[76.5%, 79.5%)	C+
[69.5%, 76.5%)	C
[66.5%, 69.5%)	D+
[59.5%, 66.5%)	D
[0%, 59.5%)	F

12 Semester Deadlines

Fall 2020: 16-week classes (deadlines will be different for first and second 8-week classes)

- Tuesday, January 18: First day of class, classes available in Blackboard Learn

- Friday, January 28, by 5:00 pm: Last day to add a class or change credit hours or grade mode in LoboWEB.

- Friday, February 4: Last day to drop without "W" grade and with 100% refund on LoboWeb

- March 13-20: SPRING BREAK

- Friday, April 15: Last day to drop without Deanâs permission on LoboWEB. Will receive a "W" grade and will be responsible for tuition for the course.

- Friday, May 6: Last day to drop with Deanâs permission with form. Will receive a "W" grade and will be responsible for tuition for the course.

- May 9-14: Finals week.

13 UNM Policies

13.1 EQUAL OPPORTUNITY AND NON-DISCRIMINATION:

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see page 15 of this link). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: *https://policy.unm.edu/university-policies/2000/2740.html*.

13.2 Copyright

All materials in this course fall under copyright laws and should not be downloaded, distributed, or used by students for any purpose outside this course. The *UNM Copyright Guide* has additional helpful information on this topic.

13.3 Accessibility and Accommodations

The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodations of their disabilities. If you have a disability requiring accommodation, please contact:

- *UNM-Valencia Student Services* if you are a Valencia campus student. The phone number is 505-925-8560.

- The *UNM Accessibility Resource Center* in 2021 Mesa Vista Hall if you are a main campus student. The phone number is 505-277-3506.

13.4 Academic Integrity

You should be familiar with *UNM's Policy on Academic Dishonesty* and the *Student Code of Conduct* which outline academic misconduct defined as plagiarism, cheating, fabrication, or facilitating any such act.

14 UNM Resources

- *UNM Valencia Campus Tutoring Services*

- *UNM Main Campus CAPS Tutoring Services*

- *UNM-Valencia Library*

- *UNM Libraries*

- *"Life" Resources available to UNM-Valencia Students*

- *Student Health Counseling (SHAC) Online Services*

15 General Education Core Curriculum Essential Skills

In addition to the course learning objectives listed above, because this class meets a UNM General Education Core Curriculum requirement, activities in each unit (i.e.: discussions, assignments, and assessments) are developed so that you can demonstrate development of these essential skills:

15.1 Critical Thinking

- Problem Setting: Delineate a problem or question to be considered critically.

- Evidence Acquisition: Identify and gather the information/data necessary to coherently address the problem or question.

- Evidence Evaluation: Evaluate the information given by sources for credibility (e.g. bias, reliability, validity) and probably truth.

- Reasoning/Conclusion: Develop conclusions and outcomes that reflect an informed, well-reasoned argument.

15.2 Communication

- Genre and Disciplinary Conventions: Use formal and informal rules/registers appropriate for the particular audience, community, purpose, context, and kind of text and/or media at hand; use them to guide formatting, organization, and stylistic choices are present.

- Strategies for Understanding and Evaluating Messages: Apply strategies such as reading/analyzing for main points or themes; recognizing the variety of rhetorical situations and accompanying strategies that may contextualize messages; locating supportive documentation for arguments to understand and evaluate messages in terms of the rhetorical situation.

- Evaluation and Production of Arguments: Recognize and evaluate the authority of sources in their own arguments and those of others; distinguish among supported claims, unsupported claims, facts, inferences, and opinions.

15.3 Quantitative Reasoning

- Communication and/or Representation of Quantitative Information: Express quantitative information symbolically, graphically, and in written or oral language

- Analysis of Quantitative Arguments: Interpret, analyze and critique information or a line of reasoning presented by others

- Application of Quantitative Models: Apply appropriate quantitative models to real-world or other contextual problems